4-2-1A. Adjustment of Coin Table and Sheet Plate Levels

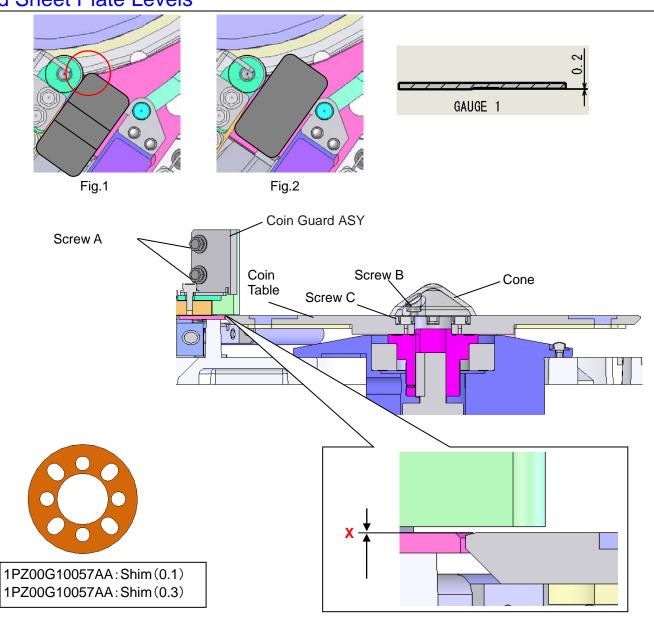
Related	Counting / Wrapping
Problem	speed down
Work Time	10 minutes
Special Tools	GAUGE 1
Standard Value	0≦X≦0.2 (mm)

(Check Point)

- 1. As the illustration Fig.1, place the flat part of Gauge 1 to Sheet Plate. Check the edge of Gauge 1 makes a contact with Coin Table slightly. In case the Coin Table is lower than Sheet Plate, perform the level adjustment.
- 2. As the illustration Fig.2, place 0.2mm thinner part of Gauge 1 to Sheet Plate. Turn the Coin Table manually. If there is a part which Coin Table push Gauge 1 up, perform the level adjustment.

(Adjustment)

- 3. Remove Coin Guard ASY by removing 2 pcs of Screw A.
- 4. Remove Cone by removing 2 pcs of Screw B.
- 5. Remove Coin Table by removing 4 pcs of Screw C.
- 6. In order to adjust the level, add or remove the shim where is placed below Coin Table.
- 7. Check the level of Coin Table by Gauge 1 again after fixing the Screw C.
- 8. After the adjustment, remount the parts in reverse order to disassembling.



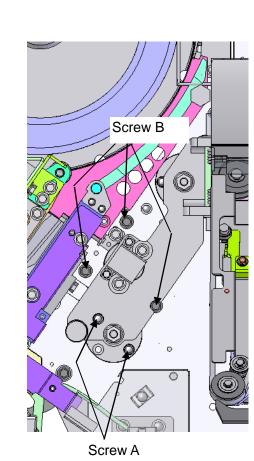
4-2-2 A. Adjustment of Feed Unit Position

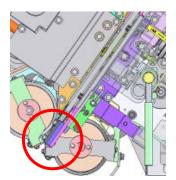
Related Problem	Coin Remaining in Coin Table, Count Speed Down
Work Time	5 minutes
Special Tools	
Standard Value	
(Unit: mm)	

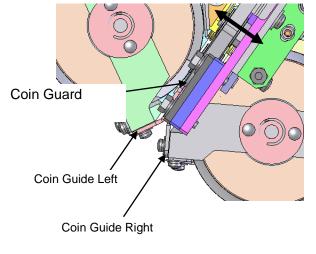
Note:

Enter Maintenance Mode and make the machine to minimum position for Sorting Track and Stack Width by 6-5 MIN SET in 6.ADJUST.

- 1. Loosen Screw A and Screw B.
- 2. As the illustration on the right, adjust Feed UNT position by moving Feed Unit to the direction indicated by arrow mark. Make the tip of Feed UNT is in the center of both side of Stack Hanger which are mounted Coin Guide Left and Coin Guide Right and then tighten Screw A and Screw B.
- 3. After the adjustment, be sure there is no interference to Coin Guard, Con Guide and Feed Pulley while closing Feed UNT.



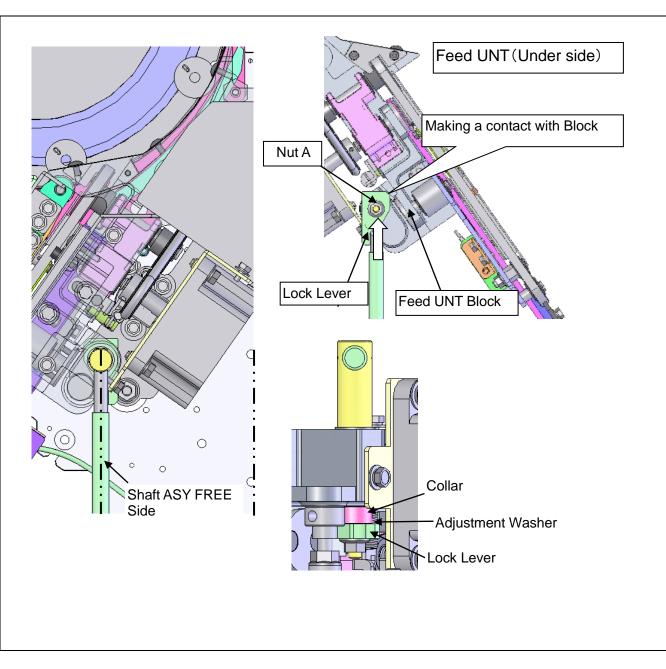




4-2-3A. Adjustment of Lock Lever

Related Problem	Coin Remaining in Coin Table, Count Speed Down
Work Time	5 minutes
Special Tools	
Standard Value (Unit: mm)	

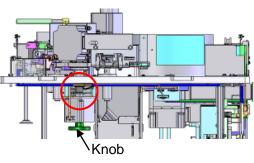
- 1. When Shaft ASY is FREE position, adjust Lock Lever by blocking it against Feed UNT Block so that Shaft ASY is parallel to the side edge of machine. Then fix Lock Lever by Nut A.
- 2. After the adjustment, close Feed UNT. In case the lock is too tight or too lose, adjust tightness of lock by adding or removing the Adjustment Washer between Collar and Lock Lever.



4-2-4A. Adjustment of Thickness Block Level

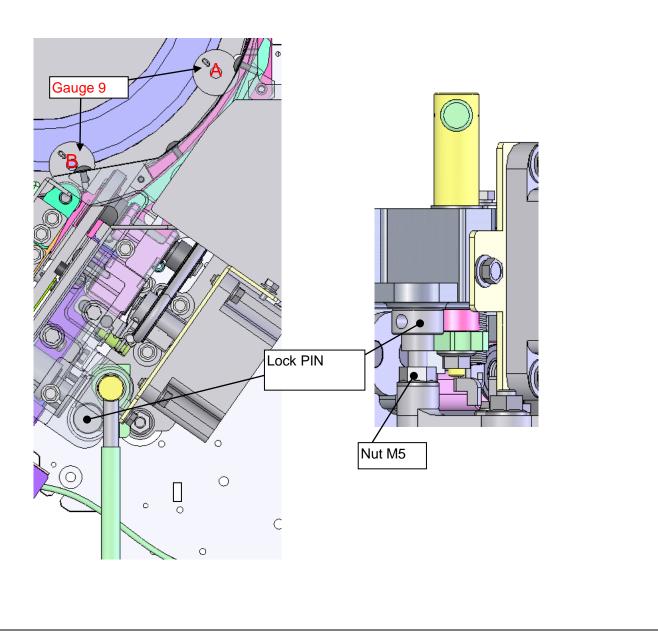
Related Problem	Coin Remaining in Coin Table, count speed down
Work Time	5 minutes
Special Tools	Thickness Gauge 、
	GAUGE 9
Standard Value (Unit: mm)	0 < X < 0.1mm

- Place the highest position of Coin Table to below Thickness Block.
 (Refer to Fig. 2 at 4-2-1 A. Coin Table and Sheet Plate Levels)
- 2. Place Gauge 9 at A position and Turn the knob for Thickness Block Motor manually and adjust the gap of Thickness Block to Gauge 9.



3. Place another Gauge 9 at B position and make sure the gap of Thickness Block and Gauge 9 at B is X. If necessary adjust it by Lock PIN and fix the Lock PIN by Nut M5.

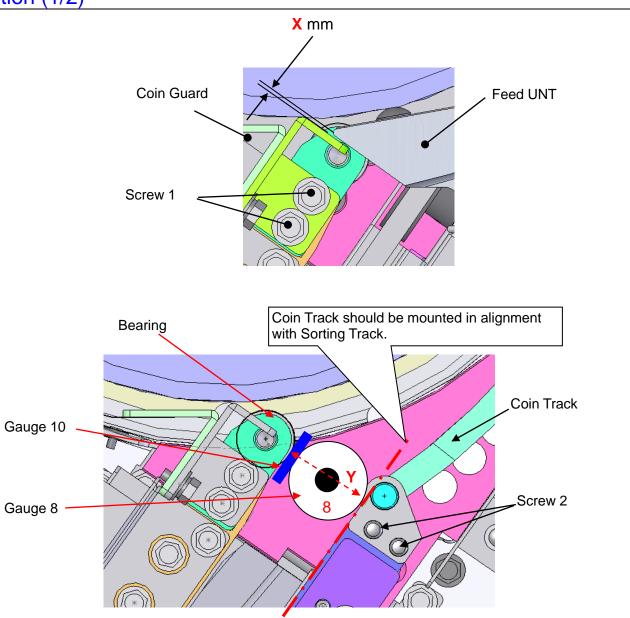
Note: When you check the gap, be sure to fix Lock PIN by Nut M5.



4-2-5A. Adjustment of Coin Guard Position (1/2)

Related Problem	Coin Remaining in Coin Table
Work Time	5 minutes
Special Tools	Gauge 8
	Gauge 10
Standard Value	$X = 0.5 \pm 0.2$ mm
(Unit: mm)	25.8mm < Y < 25.9mm

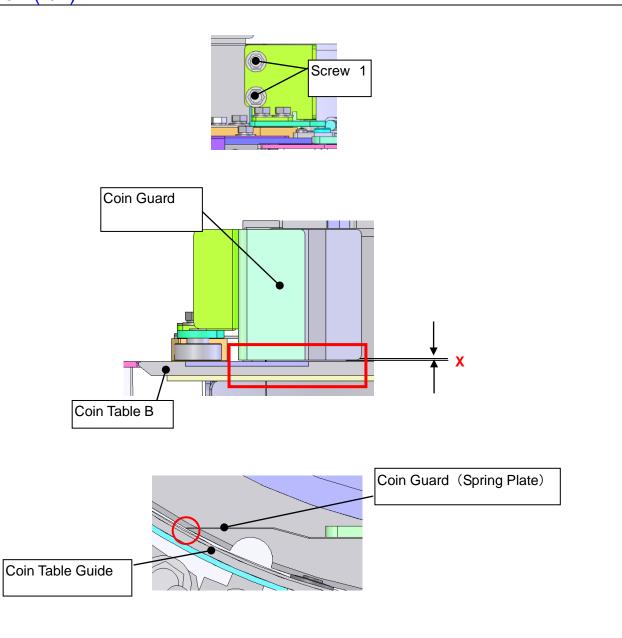
- 1. Enter Maintenance Mode and select 6-2 Sorting Track Width and then set Sorting Track Width to Gauge 9.
- 2. Loosen Screw 1.
- Be sure Coin Track is mounted in alignment with Sorting Track. (If not, loosen Screw 2 and mount Coin Track correctly.)
- 4. Place Gauge 8 and Gauge 10 between Bearing and Coin Track. Fix Screw 1 temporally while pushing the Bearing against Coin Track.
- 5. Close Feed UNT and tighten Screw 1 so that the gap of Coin Guard and Block of Feed Unit is X.



4-2-5A. Adjustment of Coin Guard Position (2/2)

Related Problem	Counting / Wrapping speed down, coin remaining in Coin Table
Work Time	5 minutes
Special Tools	
Standard Value (Unit: mm)	0.1mm <x<0.5mm< th=""></x<0.5mm<>

- 1. Set Sorting Track to the largest diameter of coin.
- 2. Loosen Screw 1.
- Adjust the gap between the bottom of Coin Guard and the highest position of Coin Table to X.
- 4. Be sure there is no gap between the tip of Coin Guard and Coin Table Guide and then tighten Screw 1.



4-2-6A. Adjustment of Thickness Brock Height (1/2)

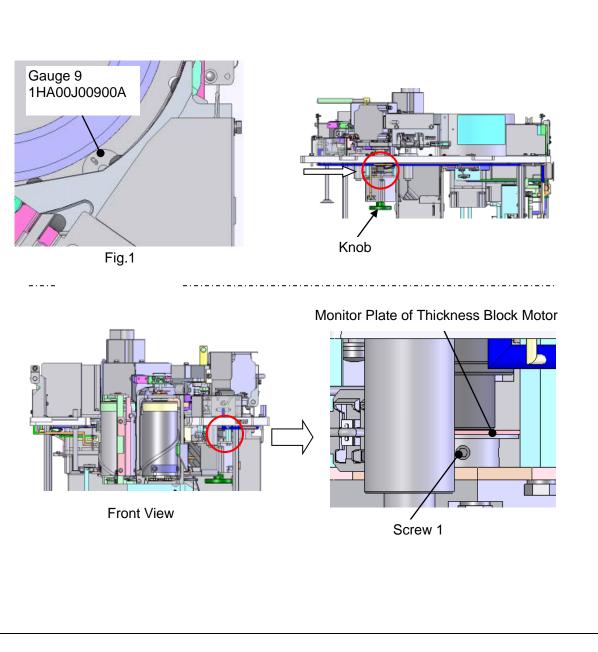
Related Problem	Counting / Wrapping speed down, coin remaining in Coin Table
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value (Unit: mm)	

Note:

4-2-1 Adjustment of Coin Table and Sheet Plate Level, 4-2-4 Adjustment of Thickness Block Level should be performed before this adjustment.

- 1. Make the highest position of Coin Table to Thickness Block.
- 2. Turn the Knob for Thickness Block Motor in order to insert Gauge 9.
- 3. Place Gauge 9 as Fig.1
- 4. Lower Thickness Block till making a contact with Gauge 9 by turning the knob for Thickness Block Motor.
- 5. Loosen Screw 1 and move Monitor Plate without moving the shaft of Thickness Block Motor. Fix the Screw 1 so that Screw 1 faces the front.

Next page

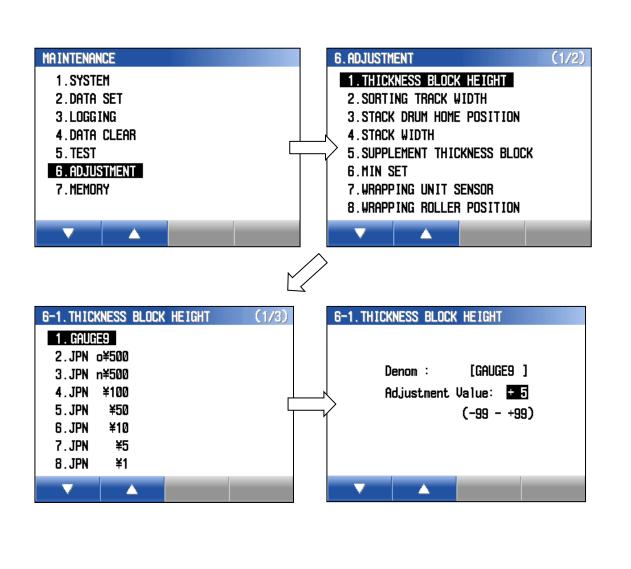


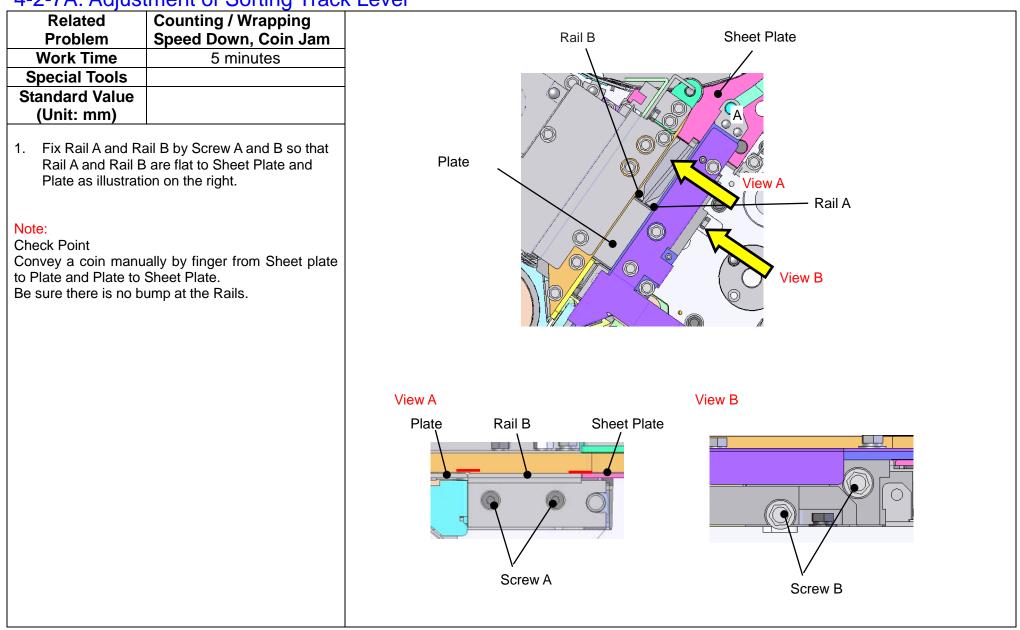
Page 7

4-2-6A. Adjustment of Thickness Brock Height (2/2)

Related Problem	Counting / Wrapping speed down, coin remaining in coin table
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value (Unit: mm)	0 < X <0.1mm

- 6. Enter Maintenance Mode and select 6-1. Thickness Block Height and set it Gauge 9.
- 7. Press START/STOP key
- 8. Check Thickness Block Height by placing Gauge 9. Refer to previous page.
- Change Adjustment Value + or so that the gap between Thickness Block and Gauge 9 is X. Press START/STOP key to set Thickness Brock.
- 10. After the adjustment, press SAVE key to save the Adjustment Value.





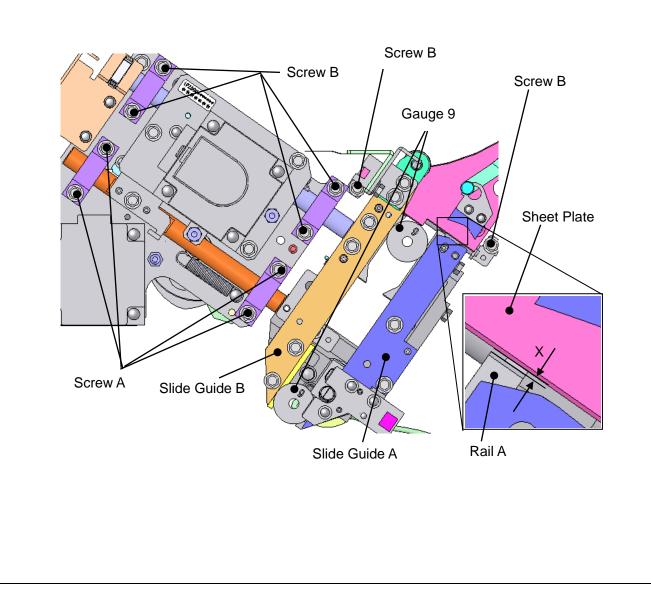
4-2-8A. Adjustment of Sorting Track Parallel

Related Problem	Coin Jam at Sorting Track, Counting Speed Down
Work Time	5 minutes
Special Tools	Thickness Gauge GAUGE 9 (2 pcs.)
Standard Value (Unit: mm)	0.1 <x<0.6mm< th=""></x<0.6mm<>

- 1. Adjust Slide Guide A position so that the gap of Sheet Plate and Rail A is X as illustration on the right. Use Thickness Gauge to check the gap. Fix Slide Guide A position by Screw A.
- 2. Place 2 pcs of Gauge 9 as illustration on the right. Tighten Screw B while holding Gauge 9's by Slide Guide B and Slide Guide A manually by hand.
- 3. Make sure the parallel of Sorting Track by using Gauge 9. If it is not parallel, readjust the parallel again.

Note:

If the Gauge is not available, use 2 pcs of same denomination coins.



4-2-9A. Adjustment of Sorting Track Width (1/2)

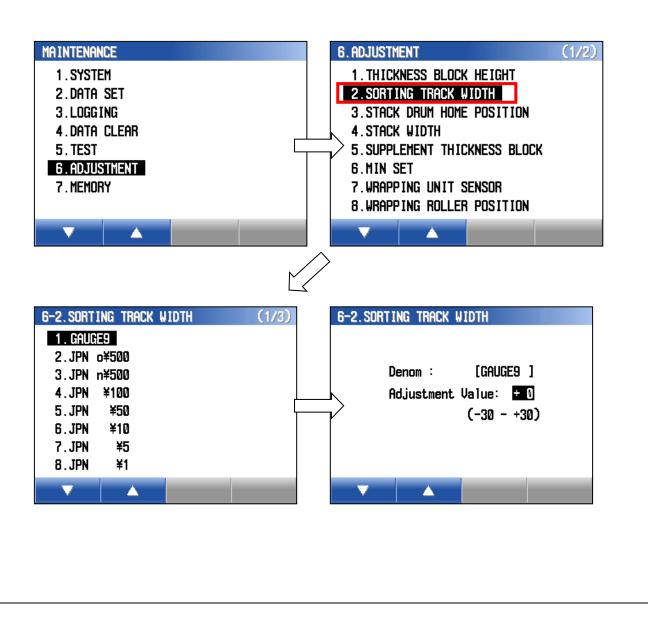
Related Problem	Coin Remaining at Sorting Track, Counting Speed Down
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value (Unit: mm)	

Note:

4-2-8 Adjustment of Sorting Track Parallel should be performed before this adjustment.

- 1. Enter Maintenance Mode and Select 6-2 SORTING TRACK WIDTH and Press START/STOP key.
- 2. Select GAUGE 9 in the menu and Press START/STOP key.

Next page.



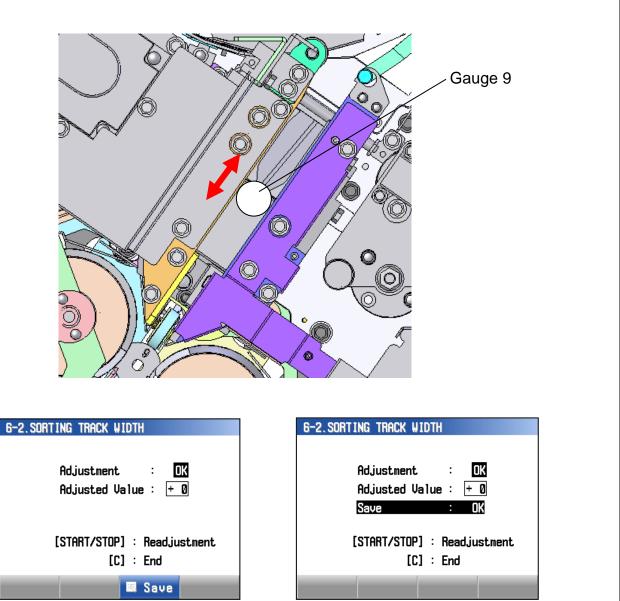
4-2-9A. Adjustment of Sorting Track Width (2/2)

Related Problem	Coin Remaining at Sorting Track, Counting Speed Down
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value	0 < X ≦ 0.1mm
(Unit: mm)	

- Input Adjustment Value + or so that the gap of Sorting Track Width with Gauge 9 is X. Press START/STOP key to set Sorting Track.
- 4. Check the gap with Gauge 9. If the gap is not X, repeat above step 3 and step 4.
- 5. When the gap is X, press SAVE key. Make sure the display indicates OK.

Hint for Adjustment Value

- +: Widen the track width.
- -: Narrow the track width
 - 1 step changes = Approx. 0.05mm



Page 12

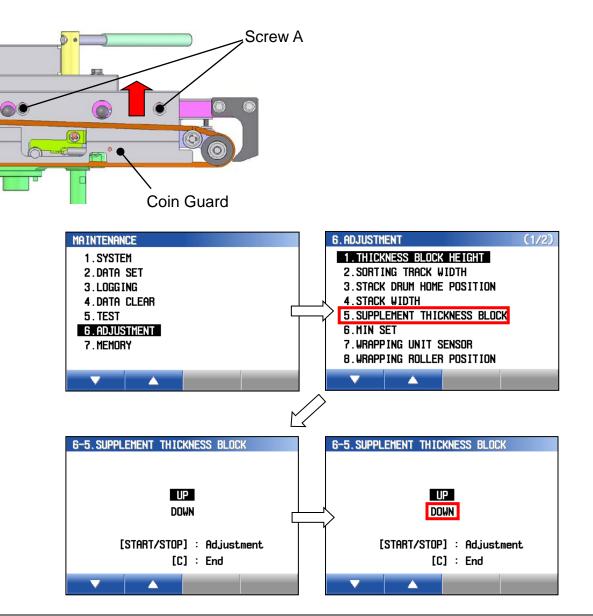
4-2-10A. Adjustment of Coin Guard ASY (1/2)

Related	Double Coin Feed,
Problem	Counting Speed Down
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value	
(Unit: mm)	

When the machine moves for setting, be sure nothing is on Sorting Track.

- 1. Loosen Screw A and move up Coin Guard ASY and fix it temporally.
- 2. Enter Maintenance Mode. Select 6-1 Thickness Block Height and perform Gauge 9.
- 3. Select 6-5. Supplement Thickness Block.
- 4. Select UP and Press START/STOP key.

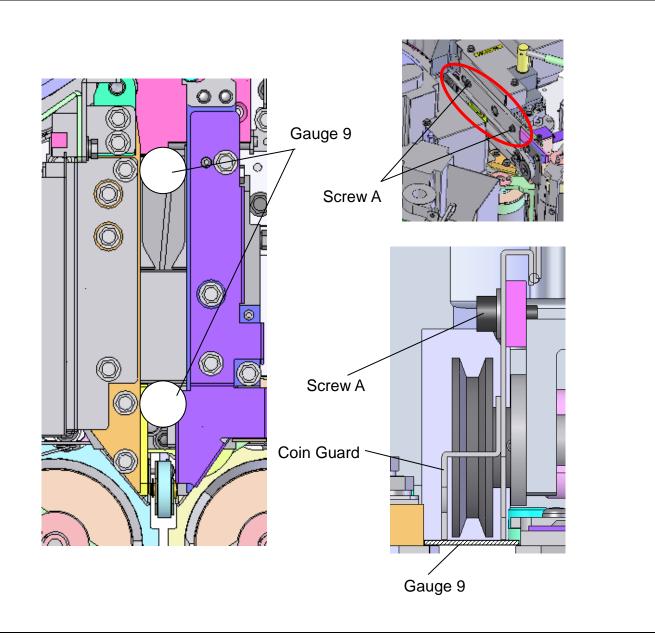
Next page



4-2-10A. Adjustment of Coin Guard ASY (2/2)

Related Problem	Double Coin Feed, Counting Speed Down
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value	
(Unit: mm)	

- Place 2 pcs of Gauge 9 as illustration on the right. Close Feed UNT.
 Fix Coin Guard by 2 pcs of Screw A while the edge of Coin Guard ASY is making contact with Gauge 9.
- 6. Remove Gauge 9 form Sorting Track. Select DOWN at 6-5 Supplement Thickness Block.
- 7. Place 2 pcs of Gauge 9 as illustration on the right. Close Feed UNT. Be sure Gauge 9's are blocked by Coin Guard. Make sure it by rotating Feed Belt.
- 8. If Gauge 9 moves by rotating Feed Belt readjust it from step 1.



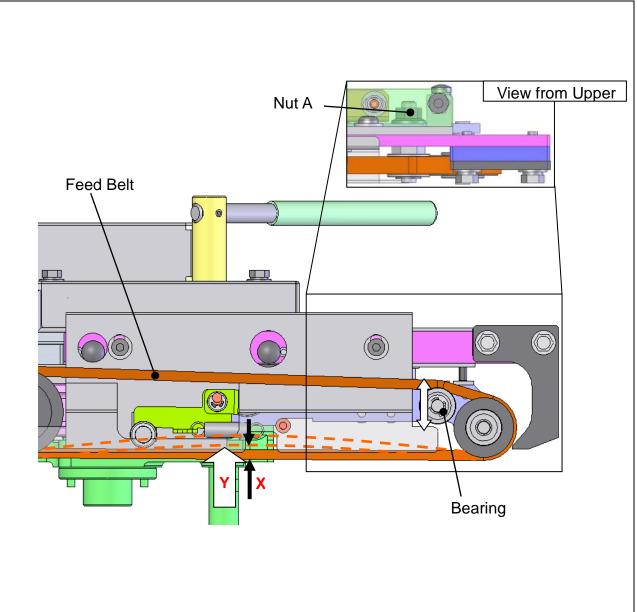
4-2-11A. Adjustment of Feed Belt Tension

Related Problem	Coin Remaining at Sorting Track, Counting Speed Down
Work Time	5 minutes
Special Tools	Tension Gauge
Standard Value	X=5.0 (mm)
(Unit: mm)	0.1≦Y≦0.2 (kgf)

Note:

Turn off the Power Switch during this adjustment.

Move Bearing in the direction indicated by the arrow so that a load at the belt center is Y, when the deflection (bending) is X.



4-2-12A. Adjustment of Feed Pulley (A) Height

Related Problem	Counting Speed Down
Work Time	5 minutes
Special Tools	Standard:
	Gauge 37
	Euro:
	Use Gauge 11,37
Standard Value (Unit: mm)	Standard:
	0.5≦X<0.7mm
	Euro:
	0.4≦X<0.5mm

Note:

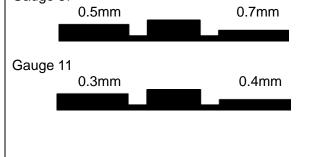
Turn off the Power Switch during this adjustment.

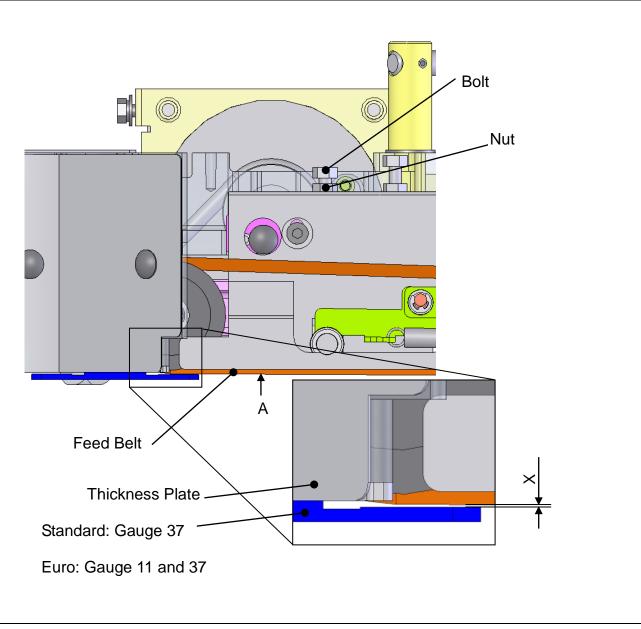
- 1. Hold A part of Feed Belt by a finger to make the belt flat.
- 2. Adjust the height of Feed Belt against Thickness Plate by Bolt so that the Belt Height is X. Fix the bolt by Nut.

3.

4. Apply both side of Gauge 37 as illustration on the right. Move the belt and check few points of belt. Then make sure the gap is X.







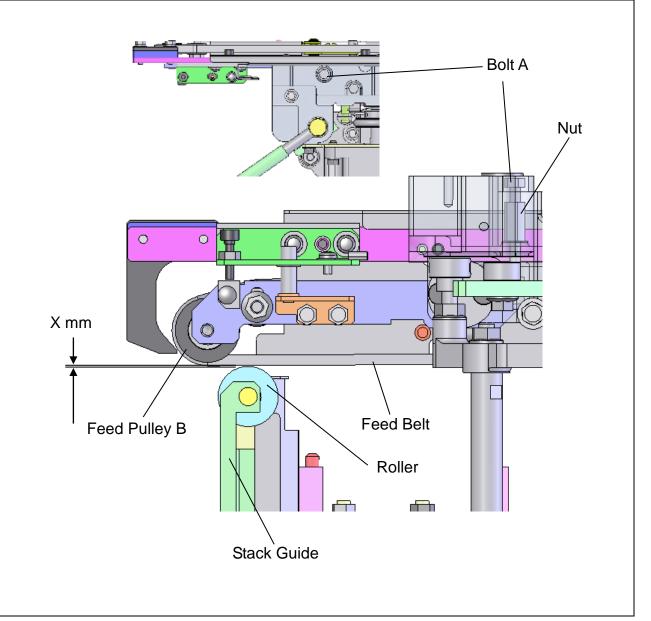
4-2-13A. Adjustment of Feed Pulley (B) Height

Related Problem	Stack Jam、Coins Crash in Roller Case UNT
Work Time	5 minutes
Special Tools	Thickness Gauge
Standard Value (Unit: mm)	0 < X ≦ 0.1mm

- 1. Perform 6-6.MIN SET.
- 2. Remove Stack Drum (Right) ASY.
- 3. Remove Feed Cover to access Bolt A.
- 4. Close Feed Unit.
- 5. Adjust the height of Feed Pulley B by Bolt A so that the gap of Roller on Stack Guide and Feed belt is X. Fix Bolt A by Nut.

Note:

After the adjustment, mount Stack Drum (Right) so that spiral of Stack Drum is symmetric.



4-2-14A. Adjustment of Coin Guard

Stack Jam
5 minutes
Thickness Gauge GAUGE 32
0 < X ≦ 0.1 mm 0.1 < Y < 0.5 mm

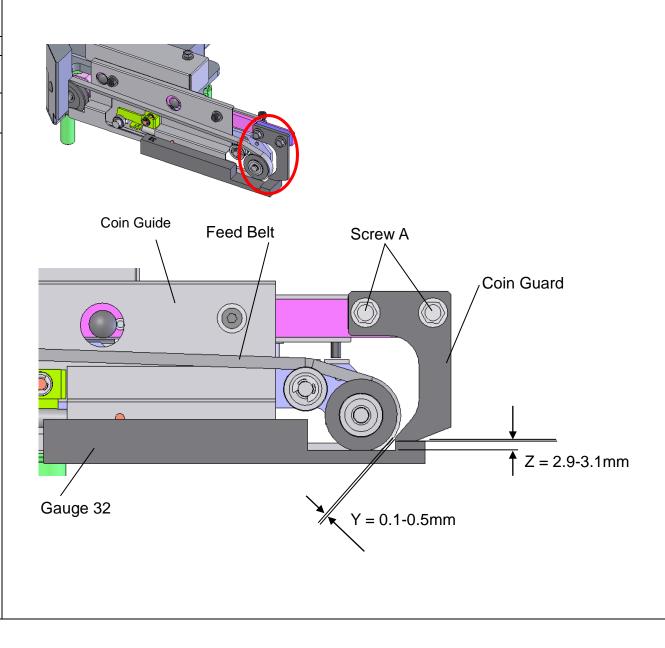
Note:

4-2-10 Adjustment of Coin Guard ASY, 4-2-13 Adjustment of Feed Pulley (B) Height should be performed before this adjustment.

- 1. Loosen Screw A slightly.
- 2. Apply Gauge 32 as illustration on the right.
- 3. Adjust Coin Guard so that the tip of Coin Guard makes a contact with Gauge 32 as well as the gap between the tip of Coin Guard and Feed Belt is Y.
- 4. Fix Coin Guard by Screw A.

Reference:

In case Gauge 32 is not available, adjust Coin Guard so that Z is 2.9mm to 3.1 mm.

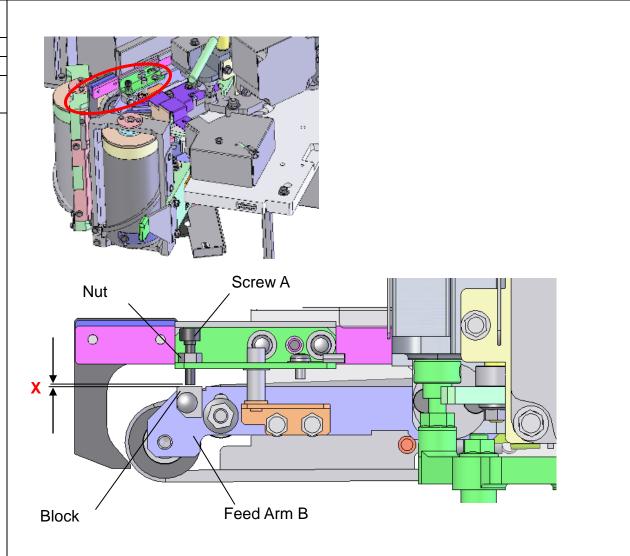


Page 18

4-2-15A. Adjustment of Feed Arm (B) Stopper

Related Problem	Stack Jam
Work Time	5 minutes
Special Tools	Thickness Gauge
Standard Value (Unit: mm)	$X = 0.5 \pm 0.1 mm$

- 1. Loosen Nut.
- Insert Thickness Gauge 0.5mm to the gap between Screw A and block. Adjust Screw A to make a contact with the gauge.
- 3. Fix Screw A by Nut.



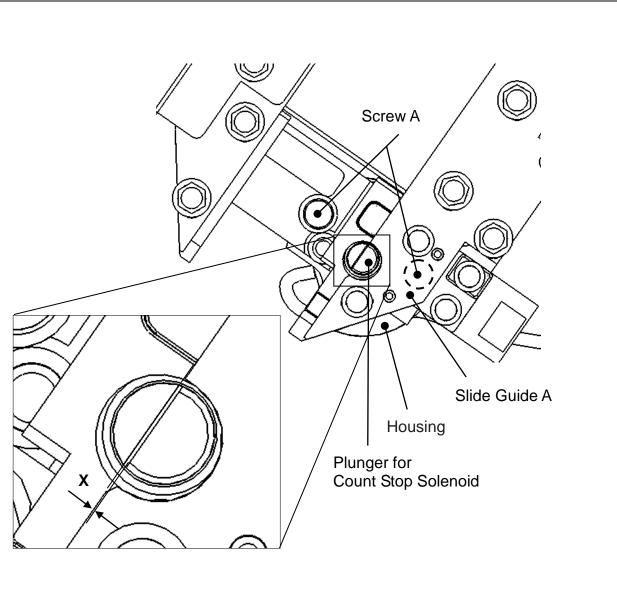
Related	Coin Jam at Sorting
Problem	Track
Work Time	5 minutes
Special Tools	Scale
Standard Value (Unit: mm)	X = 0 to 0.2mm

- 1. Make Plunger for Count Stop Solenoid to open position manually.
- 2. Loosen Screw A.
- 3. Adjust Hosing position in order to meet following conditions.

A) Plunger position is X against Slide Guide A. So it does not project from the Guide.

B) Flat part of Plunger is parallel to Slide Guide A.

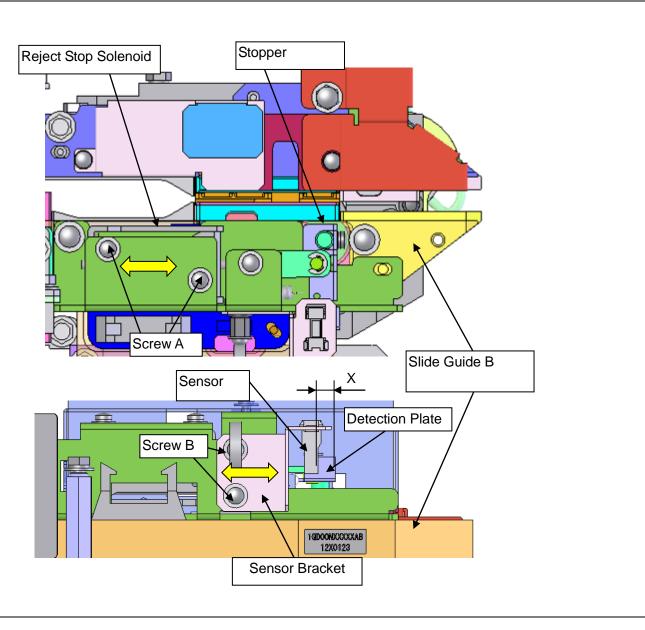
4. Fix Count Stop Solenoid by Screw A.



4-2-17A. Adjustment of Reject Stop Solenoid

Related	Coin Jam at Sorting
Problem	Track
Work Time	5 minutes
Special Tools	Scale
Standard Value (Unit: mm)	X=3.5±0.5mm

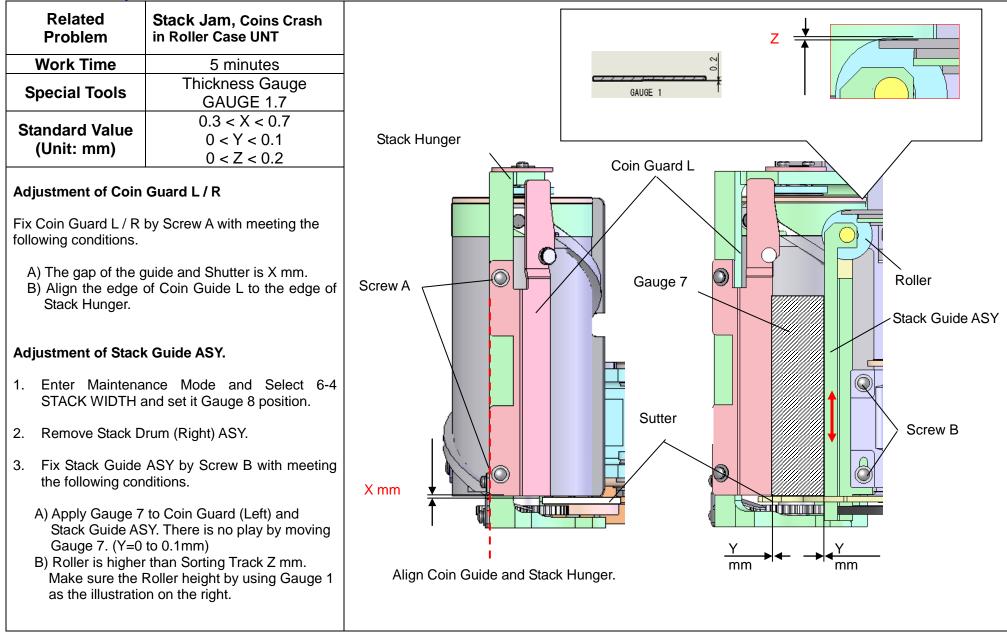
- 1. Make Plunger for Solenoid home position (The Plunger is retracted position.)
- 2. Loosen Screw A and Screw B.
- 3. Make the edge of Stopper parallel to Slide Guide B by moving the position of Reject Stop Solenoid to the directions indicated by arrow mark.
- 4. Fix Reject Stop Solenoid by Screw A.
- 5. Make the edge of Detection Plate and the edge of Sensor position to X by moving Sensor Bracket to the direction indicated by arrow mark.
- 6. Fix Sensor Bracket by Screw B.



Page 21

Page 22

4-2-18A. Adjustment of Coin Guard and Stack Guide



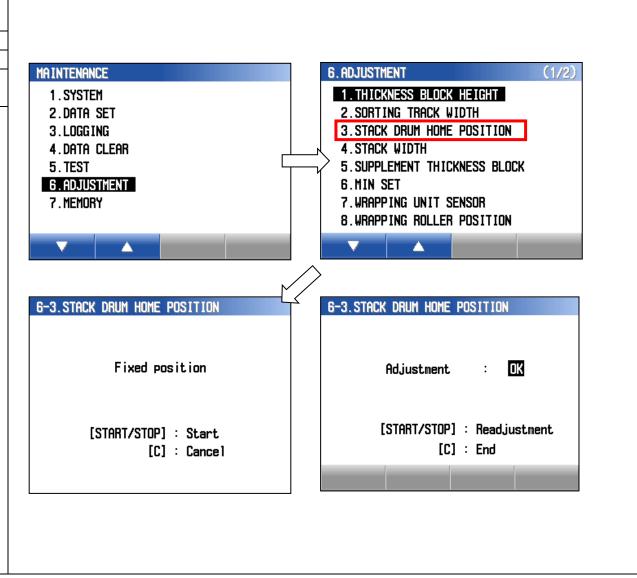
4-2-19A. Adjustment of Stack Drum Home Position (1/2)

Related Problem	Stack Jam, Counting Speed Down
Work Time	5 minutes
Special Tools	GAUGE 9
Standard Value	
(Unit: mm)	

Be sure there is no object when you start the machine.

- 1. Loosen Screw A, B described in next page.
- 2. Enter Maintenance Mode and Select 6-3. Stack Drum Home Position.
- 3. Set Stack Drum to home position by pressing START/STOP key.

Next Page.



4-2-19A. Adjustment of Stack Drum Home Position (2/2)

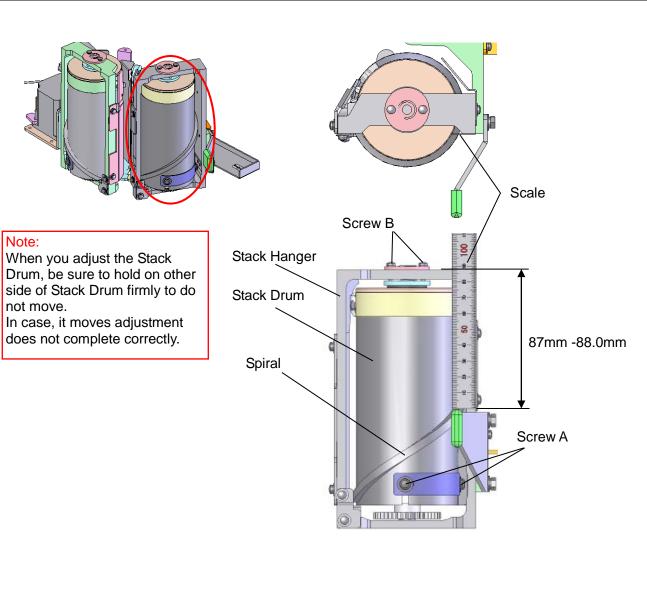
Related Problem	Stack Jam
Work Time	minutes
Special Tools	Scale
Standard Value (Unit: mm)	87.0 < X < 88.0 mm

Adjustment of Stack Drum (Right)

- 4. After setting Stack Drum Home position, measure the height of spiral by Scale as illustration on the right
- 5. If the height of spiral is not X, Hold on Stack Drum (Left) with one hand and then rotate Stack Drum (Right) to X by other hand.
- 6. Perform 6-3. Stack Drum Home Position again. Make sure the height of spiral is X and fix the Stack Drum by Screw A, B.

Adjustment of stack Drum (Left)

- Loosen Screw A, B for Stack Drum (Left) same manner as Stack Drum (Right). Perform 6-3. Stack Drum Home Position.
- 8. Hold on Stack Drum (Right) with one hand, adjust Stack Drum (Left) by other hand so that both spirals are symmetric. (Place Gauge 8 at Stack Drum and make sure the Gauge does not tilt.)
- 9. Turn off the power and fix Stack Drum (Left) by Screw A, B.

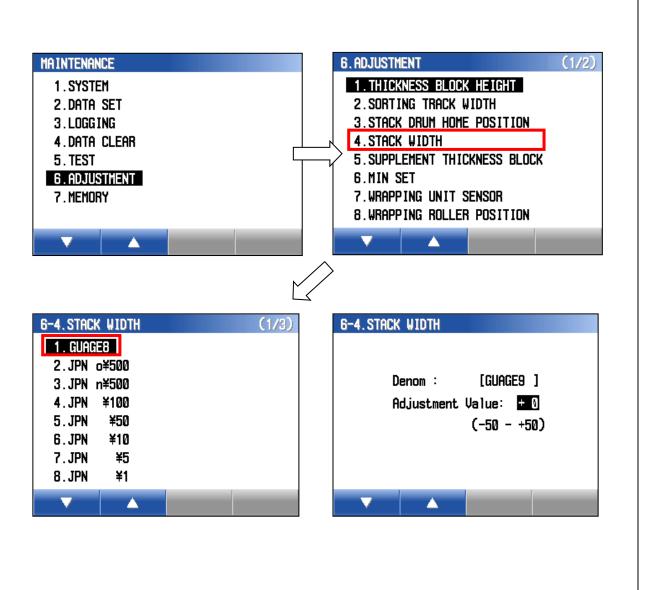


4-2-20A. Adjustment of Stack Drum Width (1/2)

Related Problem	Stack Jam, Counting Speed Down
Work Time	5 minutes
Special Tools	Thickness Gauge 、GAUGE 8
Standard Value (Unit: mm)	

- 1. Enter Maintenance Mode and Select 6-4. Stack Width. Select 1. Gauge 8.
- 2. Be sure no object on Sorting Track. Press START/STOP key.

Next page



Page 26

4-2-20A. Adjustment of Stack Drum Width (2/2)

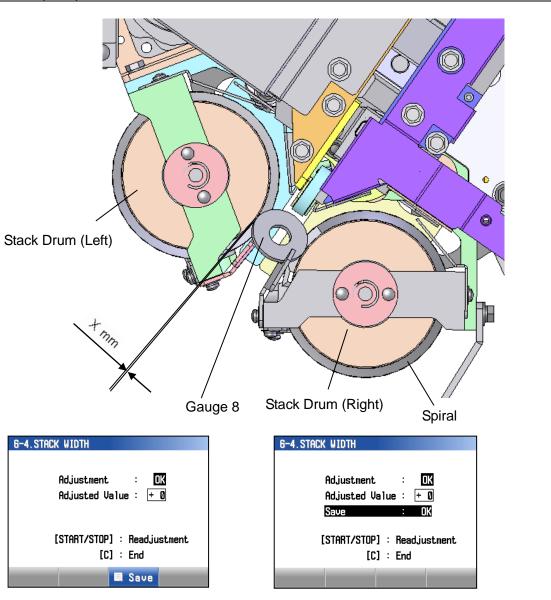
Related	Stack Jam, Counting
Problem	Speed Down
Work Time	5 minutes
Special Tools	Thickness Gauge 、
	GAUGE 8
Standard Value (Unit: mm)	0 < X <0.1mm

- 3. Place Gauge 8 as illustration on the right. Make sure the gap is X.
- 4. If adjustment is necessary, remove Gauge 8. Change Adjustment Value +, - or Jog Dial. Press START/STOP key.
- 5. Make sure the gap with Gauge 8 again.
- 6. After the adjustment, press SAVE key. Be sure the display indicates OK

Hint for Adjustment Value

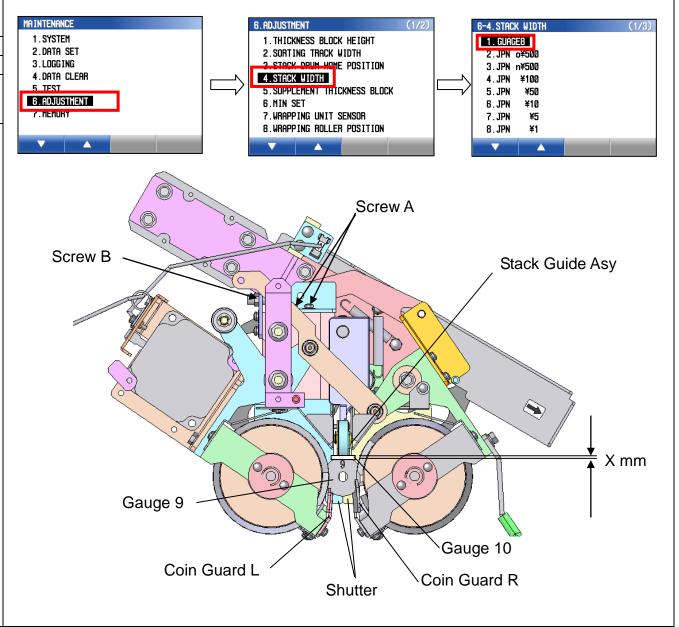
+: Widen the Stack Width

- : Narrow the Stack Width



4-2-21A. Adjustment of Stack Guide ASY Position (1/2)

Related Problem	Stack Jam
Work Time	5 minutes
Special Tools	GAUGE 9,10
Standard Value (Unit: mm)	Gauge 9 + Gauge 10 Only for China Gauge 0 + Gauge 36



Note:

4-2-20. Adjustment of Stack Drum Width, 4-2-18. Adjustment of Stack Drum Home Position should be performed before this adjustment.

- 1. Enter Maintenance Mode and Select 6-4. Stack Width. Select Gauge 8
- 2. Be sure there is no object on Sorting Track. Press START/STOP key.
- 3. Loosen Screw A about 90 to 180 degrees. Note) Do not loosen Screw A too much.
- 4. Place Gauge 9 on Shutter as the illustration on the right. Then insert Gauge 10 to the gap between Gauge 9 and Stack Guide ASY.
- 5. Adjust Stack Guide ASY position by Screw B So that the distance of Stack Guide ASY to Coin Guard L/R is Gauge 9 + Gauge 10.
- 6. Fix Stack Guide position by Screw A.

Description of access the driver to Screw A and Screw B are next page.

4-2-21A. Adjustment of Stack Guide ASY Position (2/2)

Related Problem	Stack Jam
Work Time	5 minutes
Special Tools	GAUGE 9,10
Standard Value (Unit: mm)	$0 < X \leq 0.1$ mm

How to access driver to Screw A

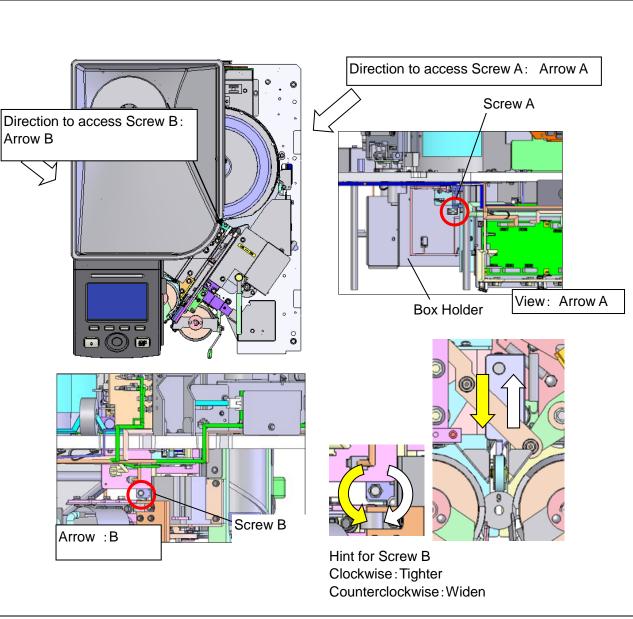
- •Remove Left Cover and Rear Cove.
- •Access Screw A by using long driver through the hole of Box Holder. Arrow A.

How to access driver to Screw B

- •Remove Right Cover and Rear Cove.
- •Using long driver, access Screw B to the direction of Arrow B

Note:

Must not turn Screw B without loosen Screw A. Without respect to this instruction, it may cause of parts damage.



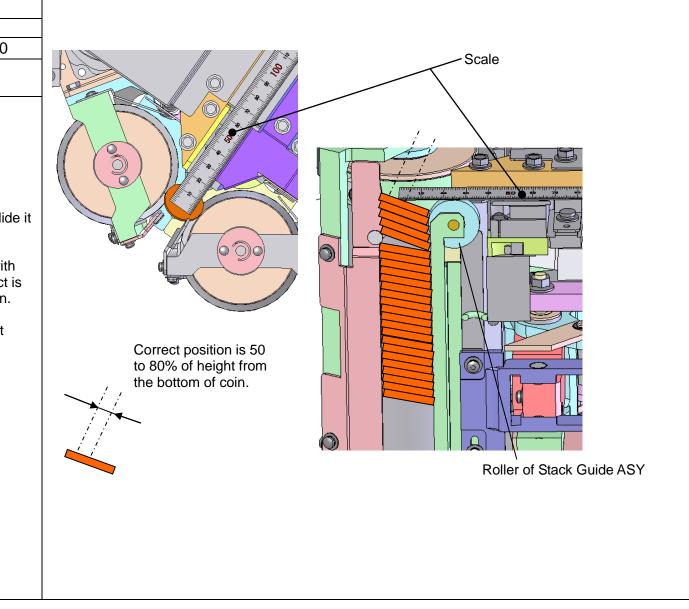
Page 29

4-2-22A. Adjustment of Coin Stack Height (1/2)

Related Problem	Stack Jam
Work Time	5 minutes
Special Tools	Scale, GAUGE 10
Standard Value (Unit: mm)	

Check Procedure

- 1. Stack the coins one less than one roll. Be sure the machine stops completely.
- 2. Place the Scale or Gauge 10 on the rail of Sorting Track as illustration on the right. Slide it along with Roller of Stack Guide ASY.
- 3. Make tip of scale or Gauge 10 a contact with the top coin. Be sure the position of contact is 50 to 80% of height from the bottom of coin.
- 4. If it is not range of 50 to 80%, perform next adjustment.



4-2-22A. Adjustment of Coin Stack Height (2/2)

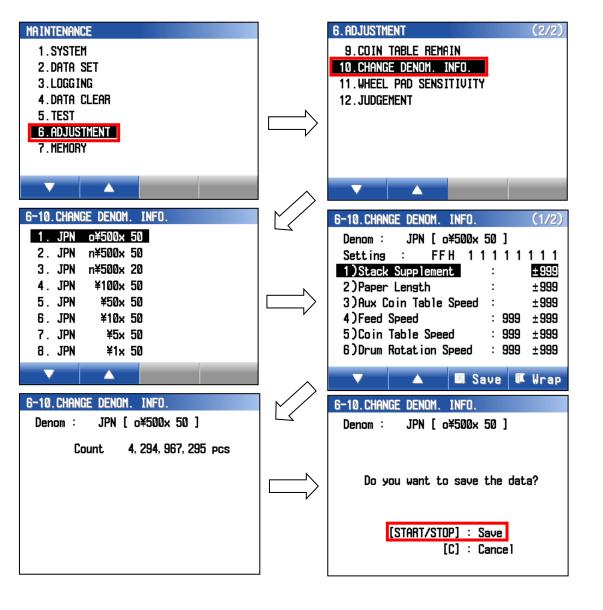
Related Problem	Stack Jam
Work Time	5 minutes
Special Tools	Scale, GAUGE 10
Standard Value (Unit: mm)	

Adjustment

- 1. Enter Maintenance Mode and select 6-10. Change Denom. Info.
- 2. Select denomination to be adjusted. Press START/STOP key.
- 3. Input + or value to change coin position.
- 4. Press Wrap key and stack the coins one less than one roll. Check Coin Stack Height same manner as check procedure.
- 5. When the Coin Stack Height is in the range, press SAVE key to complete the adjustment.

Hint for Adjustment Value

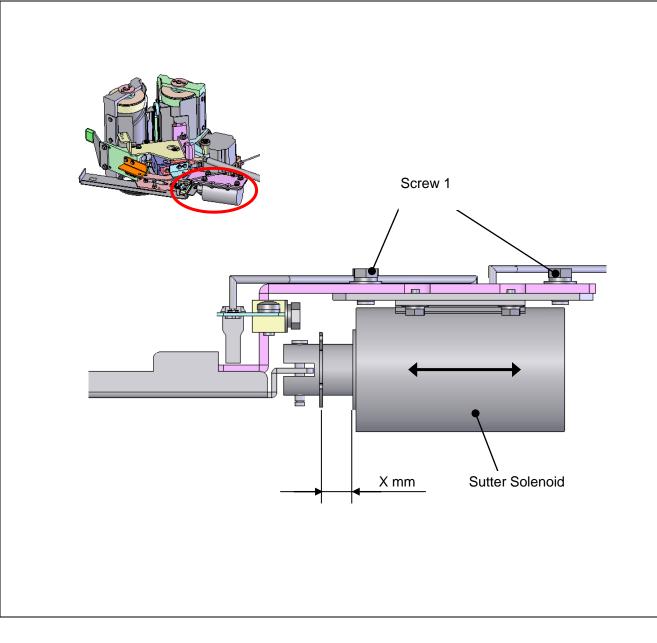
- +: Coin position goes up
- -: Coin position goes down



4-2-23A. Adjustment of Shutter Solenoid

Related Problem	Stack Jam
Work Time	5 minutes
Special Tools	Scale
Standard Value (Unit: mm)	9.1 < X <9.6

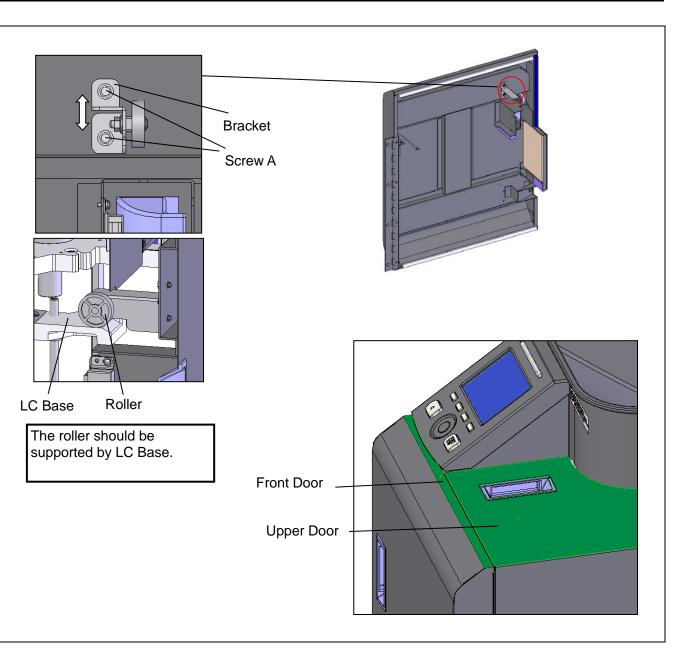
- 1. Loosen Screw 1.
- 2. Move Shutter Solenoid to the direction indicated by arrow mark so that the plunger height is X.
- 3. Fix Sutter Solenoid by 4 pcs of Screw 1.



4-2-24A. Adjustment of Front Door

Related	
Problem	
Work Time	5 minutes
Special Tools	
Standard Value	
(Unit: mm)	

- 1. Loosen2 pcs of Screw A.
- 2. Adjust Bracket to the direction indicated by arrow mark so that Front Door is parallel to Upper Door.
- 3. Fix Bracket by 2 pcs of Screw A.



Page 32

4-2-25A. Adjustment of Count Chute Unit

